

Supplementary Information for

**Highly active and stable Fe-N-C oxygen reduction  
electrocatalysts derived from electrospinning and in-situ  
pyrolysis**

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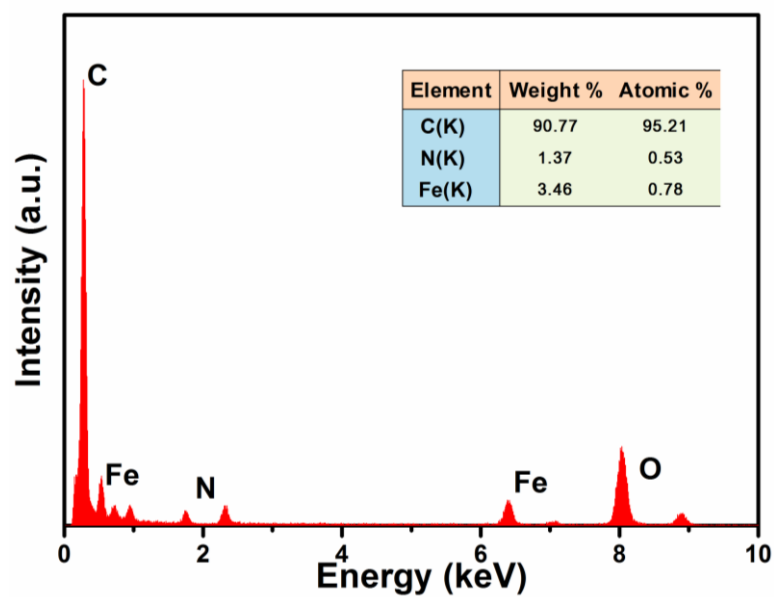


Figure S1. EDX spectre of FN-800 and the insert was the element ratio of C, N and Fe, respectively.

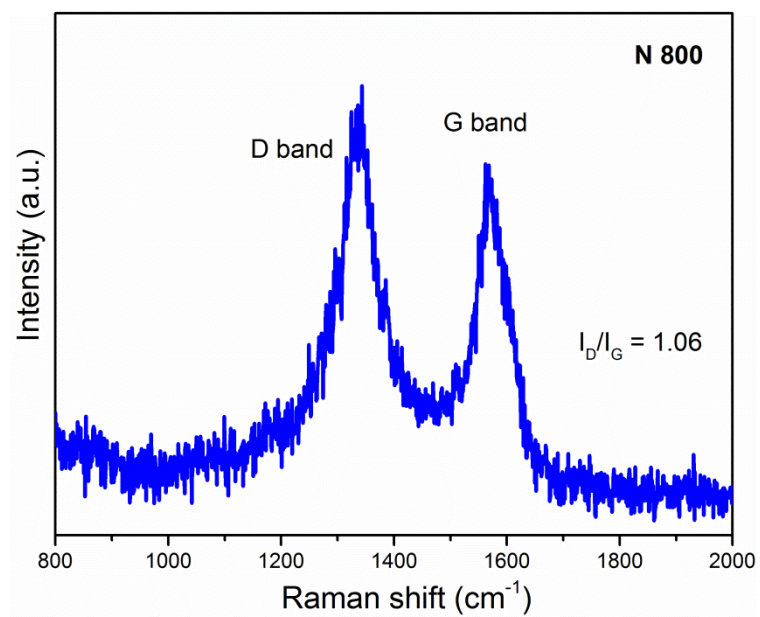


Figure S2. Pore size distributions for FN-800.

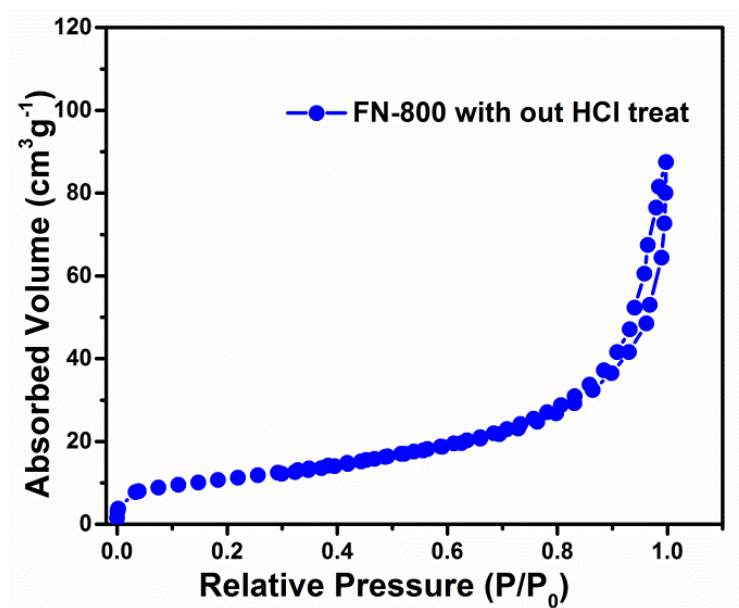


Figure S3. N<sub>2</sub> adsorption and desorption of FN-800 without acid treat.

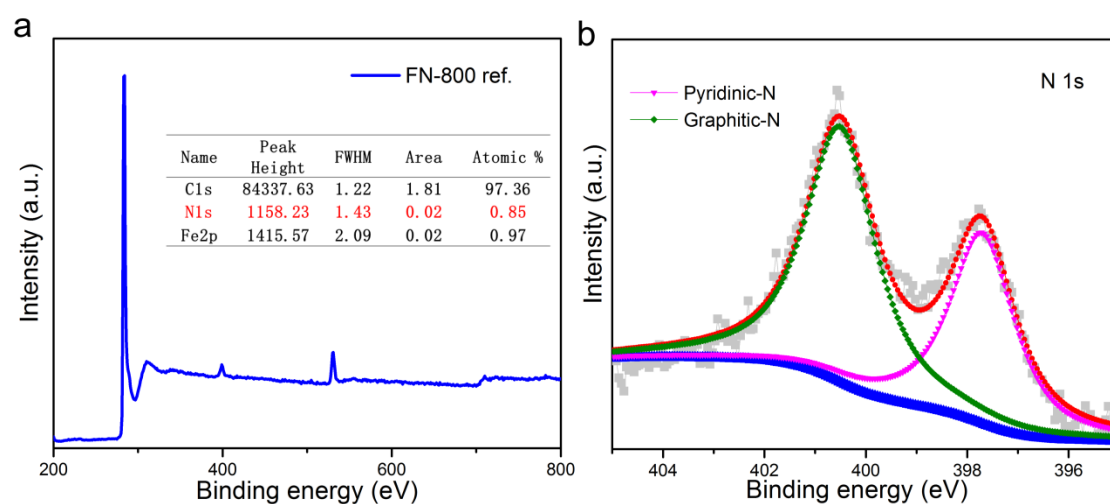


Figure S4. XPS survey scan and N1s high resolution spectra of FN-800

which uncover during carbonization process.

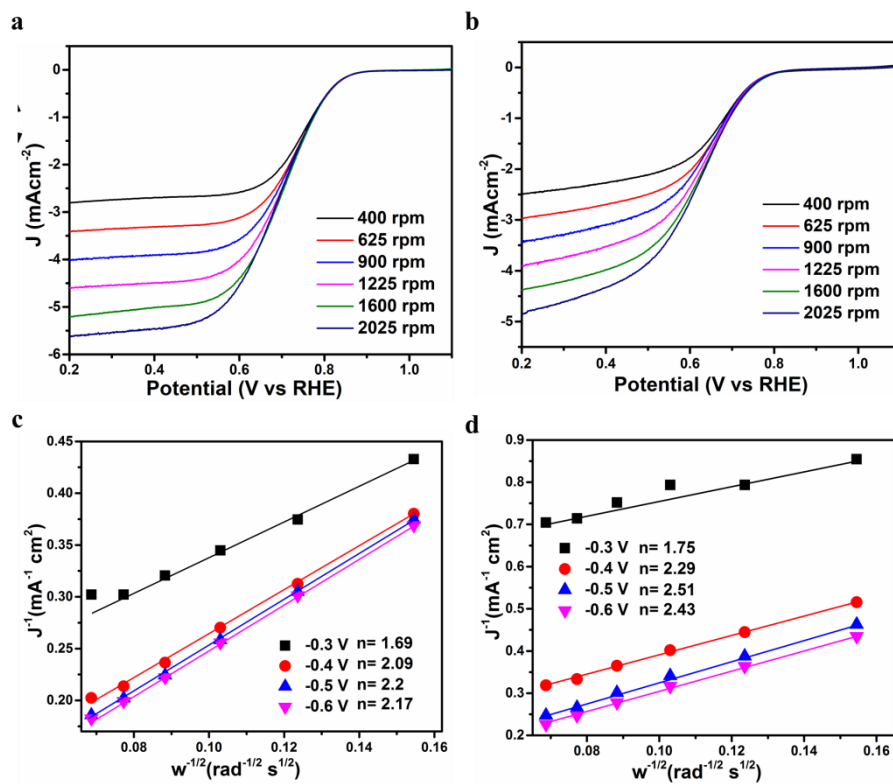


Figure S5. Polarization curves at various speeds and a scan rate of 5 mV/s:

(a) N-800; (b) F-800; K-L plots ( $J^{-1}$  vs.  $\omega^{-1/2}$ ) at different potentials of N-800 (c) and F-800(d).

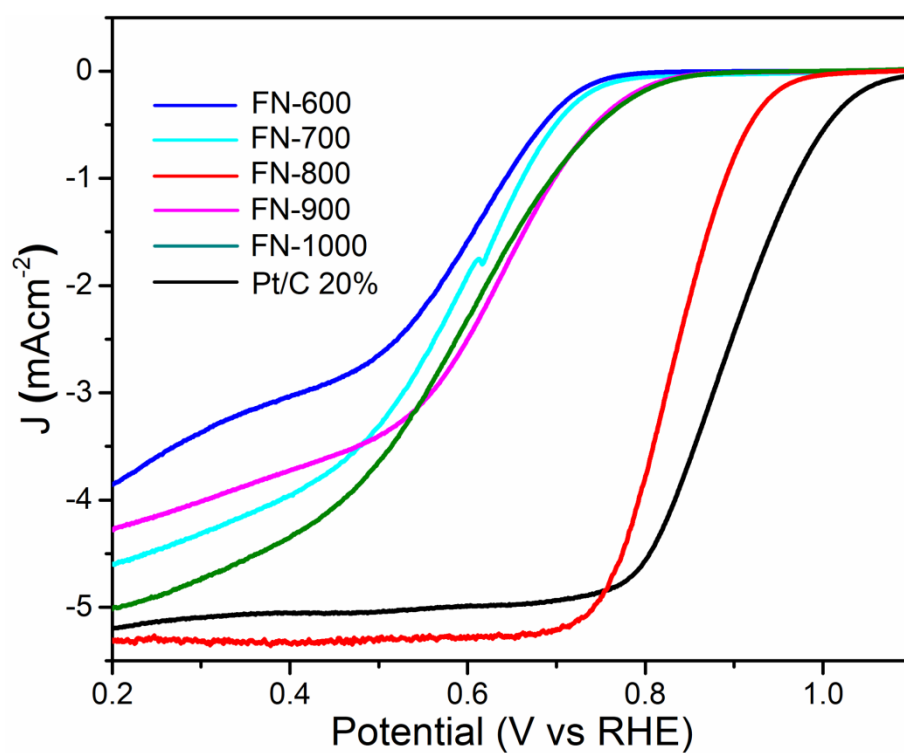


Figure S6. LSV of the Fe-N-doped carbon nanofibers catalysts with different carbonize temperature in the range of 600–1000°C.

Catalyst	Onset potential (V vs RHE)	Half-wave potential (V vs RHE)	Reference
Fe-N-C mesoporous nanofibers	0.93	0.82	This work
Fe-N-doped mesoporous carbon microspheres	1.03	0.86	Adv. Mater. 2016, 28, 7948-7955
Fe-N-doped graphene aerogels	0.97	0.82	Adv. Funct. Mater. 2016, 26, 5708-5717
Fe <sub>3</sub> C@ Fe-N-doped graphene	0.98	--	ACS Appl. Mater. Inter. 2015, 7, 21511-21520
Fe-N doped hollow carbon-nanoshells	0.98	0.85	ACS Catal. 2015, 5, 3887-3893
N-doped carbon cubes	0.92	0.8	Nanoscale, 2017, 9, 1059.
CoO@Co/N-rGO	0.95	0.81	J. Mater. Chem. A, 2017,5,5865
NCNT/CoO-NiO-NiCo	0.97	0.83	Angew.Chem. Int.Ed. 2015, 54,9654
CF-NG-Co	0.97	0.85	J. Mater. Chem. A, 2018,6,489
N-CG-CoO	0.9	0.81	Energ Environ Sci. 2014, 7, 609

Table S1. Comparison of the ORR performance between FN-800 and other reported catalysts in 0.1 M KOH electrolyte.